

UNCLASSIFIED

AD 401 274

DEFENSE DOCUMENTATION CENTER

FOR

SCIENTIFIC AND TECHNICAL INFORMATION

CAMERON STATION, ALEXANDRIA, VIRGINIA



UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

401 274

ASTIA COPY

24.7700

(5) 17511

G/030/62/002/008/001/005
I057/I257

STEP

AUTHOR: (8) Stolz, H.

TITLE: (6) The quantum theory of the conductivity tensor of the plasma model of a metal in an external magnetic field

PERIODICAL: (15) TRANS. FROM physica status solidi 4.2, no. 8, 1962, pp. 1029-1042

TEXT: The plasma model of the electrons in a metal in an external homogeneous magnetic field is used to calculate the conductivity tensor, taking into account both spatial and temporal dispersion. The method used is a quantum-mechanical version of that developed previously by Cohen, M.J. and W.A. Harrison. It is pointed out that since the electron relaxation processes do not in general affect the electron concentration, they cannot be included in the relaxation-free formalism by simply adding to the real frequency the imaginary

Card 1/2

G/030/62/002/008/001/005
I057/I257

The quantum theory of the conductivity tensor...

term i/τ , but must be included in the equation of motion for the density matrix.

ASSOCIATION: Physikalisch-Technisches Institut der Deutschen Akademie der Wissenschaften zu Berlin

SUBMITTED: May 25, 1962

[Abstracter's note: English abstract in article found to be reliable.]

Card 2/2